

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 10 FEB 2006

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Applicant's or agent's file reference 30A-95216	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. PCT/EP2005/002806	International filing date (day/month/year) 16.03.2005	Priority date (day/month/year) 17.03.2004
International Patent Classification (IPC) or national classification and IPC G06F3/033		
Applicant 3DCONNEXION GMBH et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand  30.06.2005	Date of completion of this report  09.02.2006	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Schmidt, R  Telephone No. +49 89 2399-	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2005/002806

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-13 as originally filed

**Claims, Numbers**

1-37 as originally filed

**Drawings, Sheets**

1/3-3/3 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
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International application No.  
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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-37
	No: Claims	
Inventive step (IS)	Yes: Claims	1-37
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-37
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

**Re Item V.**

- 1 Reference is made to the following document:  
D1 : US 6 225 980 B1 (STIVORIC JOHN MICHAEL ET AL) 1 May 2001 (2001-05-01)
- 2 Document D1, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):

A device for manual input of control signals in a computer-related environment, the device comprises a base (PCB 18) for supporting the device;  
a first input member (dial 20) mounted on the base for rotary movement about an axis extending generally upwardly from the base,  
the first input member having an axial extent from an end region proximal the base to an end region distal from the base and enclosing a central space within which a sensor arrangement (cf. figure 2 in conjunction with figure 30: e.g. circuitry on the PCB 18, magnets 53, etc.) is housed for detecting and interpreting rotary movement of the first input member, the first input member having an opening at each of its proximal and distal end regions (cf. figure 2). Furthermore, the device comprises one second input member provided at or adjacent said distal end region of the first input member (cf. figures 4/5 and column 7, lines 9-13: the membrane 26 in combination with said joystick 24 or switch (not shown) represents the second input member); said second input member may be a switch which is adapted to be actuated by application of finger pressure; and rotary movement of the first input member and/or actuation of the second input member generates a corresponding control signal within the computer environment (cf. column 7, line 52 - column 8, line 4).

The subject-matter of claim 1 differs from this known device in providing at least a further second input member at or adjacent said distal end region and in that said two second input members are mounted such said rotary movement of the first input member relative to the base does not influence or alter a position of the two second input members.

Hence, the subject-matter of claim 1 is novel (Article 33(2) PCT).

In the device according to D1, said single second input member is fixedly mounted in the center of the first input member. Accordingly, it does not change its position but rotates synchronously when the first input member executes a rotary movement.

It is not possible to arrive in an obvious and straightforward manner at the subject-matter of claim 1 by merely adding a further second input member like a switch to the device disclosed in D1 because, in such a device, the two second input members would necessarily be positionally influenced or altered when the first member is rotated.

Hence, the subject-matter of claim 1 is considered to involve an inventive step and thus meets the requirements of Article 33 (3) PCT.

- 3 Claims 2-37 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.